TABLE 12(1)—Continued

TABLES OF P VALUES

Length of Ship (feet)	Value of P
970	0.2084
980	0.2056
990	0.2028
1000	0.2000

TABLE 12(2)

VALUES OF "A" FOR USE IN THE EXPRESSION
$P_1 = P + "A" (L/D - L/D_s)$

Length of Ship (feet)	Value of "A"
80	0.00864
90	0.00806
100	0.00750
110	0.00696
120	0.00644
130	0.00594
140	0.00546
150	0.00500
160	0.00456
170	0.00414
180	0.00374
190	0.00336
200	0.00300
210	0.00266
220	0.00234
230	0.00204
240	0.00176
250	0.00150
260	0.00126
270	0.00104
280	0.00084
290	0.00066
300	0.00050
310	0.00036
320	0.00024
330	0.00014
340	0.00006
350	0.00000

TABLE 12(3)

VALUES OF L/DS

Length of Ship (feet)	Value of L/D_s
80	6.50000
90	6.76563
100	7.03125
110	7.29688
120	7.56250
130	7.82813
140	8.09375
150	8.35938
160	8.62500
170	8.89063
180	9.19625
190	9.42188
200	9.68750
210	9.95313
220	10.21875
230	10.48438
240	10.75000
250	11.01563
260	11.28125
270	11.54688
280	11.81250
290	12.07813
300	12.34375

TABLE 12(3)—Continued

VALUES OF L/DS

Length of Ship (feet)	Value of L/D_s
310	12.60938
320	12.87500
330	13.14063
340	13.40625
350	13.67188
360	13.93750
370	14.20313
380	14.46875
390	14.73438
400	15.00000

(h) Superstructures which are not enclosed have no effective length.

(i) When a lower deck is designated as the freeboard deck, that part of the hull which extends above the freeboard deck is treated as a superstructure so far as concerns the application of the conditions of assignment and the calculation of freeboard.

(j) A bridge or poop is enclosed only when access is provided whereby the crew may reach accommodations, machinery, or other working spaces inside the superstructure by alternative means that are available at all times when bulkhead openings are closed.

§ 45.61 Correction for superstructures and trunks.

(a) Where the effective length E of superstructures and trunks that meet the requirements of subpart D of this part is 1.0L, the minimum summer freeboard may be corrected by subtracting ½H_s.

(b) Where the effective length of superstructures and trunks is less than 1.0L the minimum summer freeboard may be corrected by subtracting a percentage of one-half of the standard superstructure height (H_s) determined by the formula:

Percentage = $(E/2L) (1+E/L) \times 100$

(c) To be eligible for the correction a trunk must—

(1) Be at least as strong and as stiff as a superstructure;

(2) Have no opening in the freeboard deck in way of the trunk, except small access openings;

(3) Have hatchway coamings and covers that meet §§ 45.143 through 45.147;

(4) Provide a permanent working platform fore and aft with guardrails;

(5) Provide fore and aft access between detached trunks and superstructures by permanent gangways;

(6) Be at least 60 percent of the breadth of the ship in way of the trunk; and

(7) Be at least 0.6 L in length, if no superstructure, is provided.

§ 45.63 Correction for sheer.

(a) The minimum summer freeboard must be increased by the deficiency, or may be decreased by the excess as limited by § 45.65, of sheer calculated from table 4, multiplied by:

$$0.75 - (S/2L)$$

where S is the total length of enclosed superstructures. Trunks are not included.

§ 45.65 Excess sheer limitations.

The decrease in freeboard allowed in § 45.63 is limited as follows:

SHEER CALCULATION—TABLE 4

Station	Actual ordinate	S. M.	Product	
After Half:				
AP	....	1		
L/6-AP	....	3		
L/3-AP	....	3		
Midship	....	1		
Sum of Aft Products				
After Standard Sheer .2665L+26.65[1]	....	....	_____	
Difference: Sum-STD	....	....	_____	+Excess/−Deficiency
AFT Sheer: Diff÷8	....	....	_____	Excess/Deficiency
Fwd. Half:				
FP	....	1		
L/6-FP	....	3		
L/3-FP	....	3		
Midships	....	1		
Sum of Fwd Products				
Fwd Standard Sheer .5330L+53.30[1]	....	....	_____	
Difference: Sum-STD	....	....	_____	+Excess/−Deficiency
FWD Sheer: Diff÷8	....	....	_____	Excess/Deficiency

[1] L in Standard Sheer=L or 500 whichever is less.

Sheer Summation

Aft Sheer±	_____
Fwd Sheer±	_____
Net Sheer±	_____
Mean: Net−2	_____ Excess/Deficiency

(a) In vessels having no enclosed superstructure from 0.1 L abaft amidships to 0.1 L forward of amidships, no decrease is allowed.

(b) In vessels having enclosed superstructures amidships less than 0.1 L before and abaft amidships, the decrease must be reduced by linear interpolation.

(c) If excess sheer exists in the forward half, and the after half is at least 75 percent of standard sheer, the full decrease is allowed. If the after sheer is between 50 percent and 75 percent of standard sheer an intermediate decrease, determined by linear interpolation, is allowed for the excess sheer forward. If the after sheer is 50 percent of standard or less, no decrease is allowed for the excess sheer forward.

(d) Where an enclosed poop or forecastle is of standard height with greater sheer than that of the freeboard deck, or is greater than standard height, an addition to the sheer of the freeboard deck may be made using the following formula:

$$S = vL'/3L$$

Where

s=sheer credit, to be deducted from the deficiency or added to the excess of sheer.

v=difference between actual and standard height of superstructure at the end ordinate.

L'=mean enclosed length of poop or forecastle up to a maximum length of 0.5 L.